

The Juvenile Instructor



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M O N T B L A N C .

"Mont Blanc is the monarch of mountains;
They crowned him long ago,
On a throne of rocks, in a robe of clouds,
With a diadem of snow."

The Alps are the highest mountains of Europe; they are the backbone, as it were, of that continent. Switzerland owes the sublimity and diversified beauty of its scenery to the presence of these mountains.

They run through the land, and occupy with their mountains, or minor spurs and offsets, nearly its whole surface. Switzerland is famous among all the countries of the world for the grandeur of its landscapes—woods, lakes, silvery, winding rivers, stupendous mountains, lovely valleys and

romantic cities and villages. The scenery in our mountains is as magnificent in many respects, as that to be found in any country; but Switzerland is a country which has been settled from time immemorial, and almost every spot in the whole land is famous in tradition or history, and possesses an interest that, added to the beautiful scenery, contributes greatly to the charm of travel. The country differs from ours also in its compactness. Mountains, villages, lakes, glaciers, snowfields, avalanches, rivers and waterfalls are all crowded into a small space;

while our country is extensive, and everything is built on a vast scale.

The engraving, which we give our readers in this number, is called Mont Blanc, and those of them who do not know better might think that these people whom they see ascending the pathway were climbing this "monarch of mountains." But this is not so. It is Mont Blanc which you see in the distance,

with its top towering to the clouds, and covered with snow which glitters as pure and unsullied as if it had just fallen.

There are many good points of view in Switzerland from which the array of Alpine peaks extending for more than 120 miles, and comprising between 200 and 300 distinct summits, capped with snow,

or bristling with bare rocks, can be seen. It was probably such a prospect that inspired those lines of Byron:

"Above me are the Alps,
The palaces of Nature, whose vast walls,
Have pinnacled in clouds their snowy scalps,
And throned Eternity in icy halls
Of cold sublimity, where forms and falls
The Avalanche—the thunderbolt of snow!
All that expands the spirit, yet appals,
Gather around the summits, as to show
How earth may soar to heaven, yet leave vain
man below."



The ascent of Mont Blanc is attempted by few. The enterprise is very dangerous; and it is only by the offer of high pay that guides can be found to encounter the risks of the ascent. It is a remarkable fact that a large proportion of those who have made this ascent have been persons of unsound mind.

One Englishman went to the summit only to say that he had been there. He boasted that he made the trip in half an hour less than it had ever been done by any other person. A lady who went up, would not allow her guides to mingle with those of another party that ascended on the same day. When she reached the summit, she ordered her guides to lift her as high as they could, that she might boast of having been higher than any other person in Europe!!

It is probable that the party which we see in the engraving is ascending the Flegère. This mountain can be ascended with considerable facility; and, because of the admirable view of Mont Blanc which it commands, it is the one most generally climbed by ladies. It is said that it can be accomplished on mule-back the whole way. The sagacity, strength and sureness of foot of the mules of that region are really wonderful. Some of the paths which they ascend and descend with ease, are steeper than any staircase. They have to climb ledges of rock two and three feet high, which are sometimes covered with broken fragments; but they pass over these in safety. So accustomed are they to climbing these dangerous places, that they can traverse a narrow ledge of a mountain, with an abyss on one side and a wall of rock on the other. They often have a peculiarity, though, that is not very pleasant to the rider, of choosing the very edge of the precipice to walk on. This habit is in consequence of the animals being accustomed to carry large packages of merchandize, which, if allowed to strike against the rock on one side, would destroy the mule's balance and throw him over into the abyss below.

But there is no danger in allowing them to pick their own way, for they can find it often far better than their riders can direct them.

The poet Rogers has accurately described this animal when he says:

"Shunning the loose stone on the precipice—
Snorting suspicion—while, with sight, smell, touch,
Trying, detecting, where the surface smiled;
And with deliberate courage, sliding down,
Where, in his sledge, the Laplander hath turn'd
With looks aghast."

The feed on these mountains is not very abundant; but what there is, is very rich and nutritious; and the inhabitants of those valleys drive their young stock high up into the mountains, to get the benefit of the feed, while the short summer lasts. The labor of driving them into the mountains is both arduous and hazardous. For instance, in the valley Chamouni, the owners of young stock drive them to a certain point where they can all be collected together, ready to be driven across what is known as the *Mer de Glace*, which literally means, "The Sea of Ice." When they are all gathered, a number of peasants go out upon the ice with hatchets and other tools, to level such places as may be dangerous. After the ice has been prepared, men are stationed at certain intervals on it to point out the line of march. This occasion is made a kind of holiday; men, women and children attend the procession, passing the whole day on the mountain, and keenly enjoying their trip.

After the herd has been driven across, one man remains with it to take charge of it. He carries with him sufficient bread and cheese to last him one month. Before the month is ended the supply is renewed, being carried to him by some one of his friends. This food is furnished by the owners of the animals. He is allowed one cow, which furnishes him with milk, and he

passes his time during the three months that he is the sole inhabitant of those untenanted wilds, looking after his stock and knitting stockings.

The guides which accompany the visitors to the Alps frequently carry the travelers' baggage, as you see them doing in the engraving. They are very strong, fearless and sure-footed, and they will trudge with their loads across places where a misstep would be fatal. Yet they do not seem to mind the danger, but walk as if the thought never occurred to them that it was possible to slip and fall into the abyss below. There is a place in the Alps which is famous for its hot-spring baths. The road to them from the north is a mere shelf—in some parts a mere groove cut in the face of the huge cliff, and is very narrow, at the turns of the zigzags the traveler constantly overhangs a depth of nearly 500 feet. This road must be traveled to reach the baths from the north, unless, indeed, the traveler goes by another road, which is *only* 200 miles round. Persons who are very infirm, proceeding to the baths, are borne on the shoulders of the guides in a sort of litter. The guides never shrink or tremble in traveling with their burden in the most frightful places; but it is said they often have to bandage the eyes of the persons they carry, to shut out from their sight the terrors of the pathway.

For the Juvenile Instructor.

Chemistry of Common Things.

IODINE.

THIS element exists in sea-water, in sponges and sea-weeds. It is prepared from kelp or barilla, a crude alkali consisting of the ashes of marine plants. These ashes are made into a lye with water; the solution obtained is concentrated, and, besides obtaining soda from it, by treating it with sulphuric acid and manganese (the black oxide), iodine is obtained. This is done by the application of heat, for this element is volatile at low temperatures; it passes over as a vapor and is sublimed. In this state, it forms small crystals somewhat resembling black-lead (carburet of iron or plumbago), it is seen as minute scales of a bluish-black color and of metallic appearance. In this state, it is friable (easily reduced to powder) and is of a hot, acrid taste, slightly soluble in water, extremely poisonous—although useful in medicine when properly prepared. It is also used in photography, having the property of uniting with metal, silver for instance, with which it forms the "iodide of silver," a substance sensitive to the action of light. Iodine is useful in many diseases; it may be prepared as a "tincture of iodine," and also with potassa. It has many qualities similar to chlorine and bromine; it destroys vegetable colors, smells like chlorine, and has like affinities to both.

The discovery of iodine led to more complete knowledge of some doctrines relating to oxygen. It had been said that all acids derived their acid qualities from oxygen; the very name oxygen means acid-maker. It was found that iodine makes acids: iodine plus oxygen form iodic acid; iodine plus chlorine form chloriodic acid; hydrogen plus iodine form hydriodic acid. If chemists were naming oxygen now, such a name would not be given to it. It is well to remember this, for many of the elements have received fanciful names which do not give a correct idea of their qualities. Iodine means "violet color," because the vapor of that element is of a violet tint; but the

choice of names has often been very inappropriate. It is better for the student to try to remember the *properties* of the elements; the relations they bear to each other; the way they combine together and separate from each other; and consider the names of no consequence except to identify them. For chemistry is quite independent of names and theories, only as they may designate substances or explain the laws of that science. Everything has to be *proved* to be true by *experiment*. This is what the young chemist must do, if he will become a chemist practically. Procure the substances, handle them; notice their form, color, smell; read as much as possible about them, so as to have the benefit of the knowledge of others, but **examine** and **experimentalize**. This is the reason why experiments are given from time to time that the student may know how to do things and **DO** them.

There is another thing worthy of notice: the language of chemistry is becoming somewhat different. This comes from fresh discoveries being occasionally made. New substances have to be named; old names have to be changed for others. Symbols have to be used to save labor in writing and to enable the nature of compounds to be more readily understood. H I conveys the idea of hydrogen and iodine, or hydriodic acid as perfectly as the words do; Cl I means chlorine and iodine; the same of other symbols when understood, as we have seen before. This is why we should familiarize ourselves with the modes of expression used by chemists; and become acquainted with the nomenclature adopted by them.

Iodine is a valuable substance; many very brilliant experiments are performed with it in the lecture room, owing to its superb *violet color* when in vapor. Dangerous diseases are arrested and healed by it; the beautiful photographs and enchanting pictures taken by the action of light contain iodine. Iodine combines with starch, forming an insoluble substance of a deep blue color; so that starch is used as a *test* in chemistry for the presence of iodine.

BETH.

(To be Continued.)

For the Juvenile Instructor.

Little Willie.

CHAPTER XIX.

LITTLE WILLIE GROWN TO MANHOOD.

ON the last evening, the audience requested the debate to be continued longer. Willie expressed his willingness to comply with their request; but Mr. Theobald objected. He said that he would not stand there one minute after the expiration of his obligation. It will be remembered that, at the beginning of the debate, Mr. Theobald said that he would whip the boy first, and then he would be willing to meet any of the leaders of the "Mormon" Church; but his tone and expression now indicated that he had become weary of his task.

Mr. Theobald, in his closing speech, announced a lecture that he purposed to deliver in the Baptists' chapel. No females nor males under nineteen years of age were to be admitted. Willie told the people that he felt extremely sorry that he was so unfortunate as to be a few months under the age of nineteen; for his lack of years deprived him of the privilege of attending the important lecture just announced.

In going out of the chapel, Willie had to pass through the

vestry, where, to his astonishment, he found fifteen or twenty of the Methodists awaiting his arrival. He passed round shaking hands with all. Some wished that he was a Methodist; others thought him capable of doing much good if he only had a good cause to advocate.

Willie answered: "My labors are in defense of truth. The work of God is the cause that I have espoused; and I deem no other cause worthy of being placed ahead of it."

A party of friends (outsiders) on whom the discussions had made a favorable impression, presented Willie with a nice Japan box, several fine shirts, a set of gold studs and a silver tooth-pick; and, in addition to this, bade him welcome to their homes.

Within a few weeks, five or six were added to the Church; houses were opened in all the country round for preaching, and friends were raised up in every direction which made a great change in Willie's condition.

About this time, he went to Bilton, a small village in which resided the gentleman whose gooseberry bush was killed in answer to the prayer. The gentleman was now in the Church and a faithful Latter-day Saint. Willie had a very pleasant interview with him, and visited several friends and conversed with them about the principles of the gospel, and distributed tracts throughout the neighborhood. His whole soul was interested in the work; he felt that God was raising up friends for him on every side. His heart was filled with thanksgiving and praise to Him for his great mercy and kindness.

Evening closed in upon the labors of the day, and reminded Willie of another appointment. He had engaged to spend the evening and stay over night with a brother whom he had lately baptized, and whose residence was nearly two miles distant. The river Knidd lay between him and his destination. The stream was deep and slow. The main traveled road led by Knaresborough to his friend's house, a distance of about six miles, while a direct course would not exceed two.

Willie now stood near a railroad bridge, hesitating whether to go over, which would save him upwards of four miles. He saw that the night was setting in very dark; the clouds were gathering in the sky. He did not hesitate long, but finally concluded to pass over. The railway was fenced in; he climbed the fence, and in double-quick time passed the bridge. He had no sooner gained the other side, than he heard a train behind him. It seemed to fly as on the wings of the wind. The bright light in front, the red, burning coals that dropped beneath the engine, and its terrific speed, gave it the appearance of a huge monster.

After the train had passed, Willie entered a path that led through the fields towards the place of his destination. At first the path was plain; but, as he advanced, it became more difficult to trace, and finally was entirely lost. He traveled on, not knowing where he was going. He often thought that he could discern familiar objects just ahead of him, and as often was deceived. He eagerly climbed upon the fences and strained his eyes to catch a sight of some tree or object that he had seen before, but all was in vain. He was perfectly lost; he could not tell the north from the south, nor the east from the west; and there was nothing before him, apparently, but to walk the lonely fields through the silent hours of the night. He finally came to a forest of large trees, the shade of which gave a deeper hue to the darkness of that very dark night; he found it difficult to avoid coming in contact with them.

Willie now inclined to the right of the timber, walked leisurely along, entirely lost in thought. He carried a small cane in his right hand. His object in walking appeared to be to keep warm rather than to aim for any given point. Suddenly his motion was arrested. He now stood still without knowing the reason why. Instinctively he reached his cane in front of him, when, to his astonishment, he could find no bottom. He thanked God for this miraculous preservation, turned right-about-face, and tried to retrace his steps; in doing so, he struck a wagon track, which he followed until it led him to the main road, and not far from his friend's house where he had engaged to spend the night.

WM. W. B.

(To be Continued)

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GEORGE Q. CANNON, : EDITOR.

SATURDAY, OCTOBER 8, 1869.

EDITORIAL THOUGHTS.

BEFORE the death of the Prophet, Joseph Smith, he predicted concerning the power that would be manifested by Satan to deceive the people; by the power of the evil one, men would perform many wonders, and even make fire come down from Heaven on the earth, in the sight of men, and perform many other miraculous works; but he told the Saints that, whenever a man brought fire down from Heaven, they might know he was a false prophet.

Satan has always had great power among those who have rejected the gospel. Men do not come under condemnation until they hear the truth and the testimony of the servants of God, and reject them. That portion of the spirit of the Almighty which they have previously possessed then leaves them, the light which they have had gives place to darkness, and the adversary has great influence over them, for they become his servants. This is one reason why he has more power among wicked and corrupt persons, when the gospel is upon the earth, than at other times.

Soon after the Prophet Joseph's death, "spiritualism," as it is called, was made manifest; and men and women began to receive revelations, not from the Lord Jesus, but from spirits; and great wonders began to be shown.

We read, the other day, about a man in England, who is a great spiritualist. His name is Home. He performs great works in the sight of the people; and a book has been written and published by an English nobleman, for his friends to read, describing the marvelous nature of some of Mr. Home's wonders. At one of his performances, which are generally held in the evening, and are called *séances*,—a large table containing various articles, danced around the room, and was nearly tipped over; still, the articles upon it did not slip off. Chairs were moved by an unseen power, and music played by invisible hands. The spirits were said to be seen and their voices heard. But the most remarkable thing about these manifestations was, that Mr. Home was taken up in the air and carried out of one window and brought into the window of another room.

These are some of the wonderful things which this man performs; but he does not pretend to do them by the power of God: it is the spirits who aid him, and under whose influence, he professes to act.

What a cunning plan this is of the devil to deceive people, and prevent men and women from obeying the teachings of Jesus! He will give them power to do these things without believing in Jesus, without repenting of their sins and being baptized or having hands laid upon them. He makes it very easy for them, and tries to lead the world down to destruction by this means. "Bread is the gate, and wide the way that leadeth to death, and many there are that go in thereat; but strait is the gate, and narrow the way that leadeth unto the exaltation and continuation of the lives, and few there be that find it."

God requires us to obey His laws, to bring our wills into subjection to His; to deny ourselves of those things which are

evil; to curb our appetites and passions, to purify our hearts and bring our whole body in subjection to His holy spirit. Jesus did this. He went and was baptized by John, in the Jordan, "to fulfill all righteousness."

If we obey God, He will prepare us to dwell eternally in His presence; for, by obeying Him, we will be made pure and holy, and be free from sin, and He will give unto us His holy Spirit and the gifts of the Spirit. These gifts are not like the power of Satan. Of what use or benefit is it to a person to see a table tip, to hear music played, to be carried out of one window into another? Is a man any better for all this? or are those who see it profited? Satan gives this power to mankind to delude them and lead them from the true path; but they are not benefitted by it. But when a man or woman, or a boy or girl receives the Holy Ghost, it brings peace, joy, love and happiness; and the person who is in possession of this Spirit has a feeling of kindness and charity towards all mankind. His mind is enlightened and the things of God are made plain unto him. Society is benefitted and the world is purified by its bestowal.

No body of spiritualists, with all their table-turning and their revelations from spirits, could do what has been done in these valleys; because all their power and manifestations would fail to produce that union, harmony and love which have enabled the people of God, who have obeyed the truth, to accomplish all that we see around us. And we have a community now growing up whose members are filled with love, kindness and good works. This is done by the guidance of the holy priesthood, which God has placed upon the earth.

Now, the only safe course, children, for you and all mankind to pursue is to obey the priesthood, to listen to the teachings of the servants of God, and never murmur against them. Then God's power will increase with you, and you will add knowledge to knowledge, light to light, and be brought back into the presence of God. Then, when false prophets arise, and wonderful works are performed by them through the power of the evil one, you will not be deceived; for you will know that they are not of God; and though they may call fire down from Heaven, you will still cling to the priesthood of God. Apostates and all who fight against the priesthood are liable to be led astray by the miracles and wonders which are performed by wicked men; for they have no guide; they have forsaken the true path and the authority which God has bestowed.

Children, think of these things and remember them throughout your lives.

BABY'S FIRST TOOTH.

Come look at the dainty darling!
As fresh as a new-blown rose,
From the top of his head so golden,
To the dear, little, restless toes;
You can tell by the danc'g dimples,
By the smiles that come and go,
He is keeping a wonderful secret
You'd give half your kingdom to know.

Now kiss him on cheek and forehead,
And kiss him on lip and chin;
The little red mouth is hiding
The rarest of pearls within.
Ah, see! when the lips in smiling
Have parted their tender red,
Do you see the tiny, white jewel,
Set deep in its coral bed?

Now where are the sage reporters,
Who wait by hamlet and hill,
To tell to the listening nation
The news of its good or ill?
Come weave with your idle gossip
This golden blossom of truth—
Just half a year old this morning,
And one little pearly tooth!

HUNTING THE REINDEER.

IN number twenty-three of our last volume, we gave a short account of Lapland and the Reindeer; to-day, we have an engraving which will convey to our little readers a much better idea of those animals and that land, than any lengthy description of ours could do. Here, indeed, we have the Laplander, in his winter costume, muffled in warm furs, while he is swiftly drawn, in his comfortable sled, over the snow covered soil, by one of these graceful and hardy animals which God in His kindness has given to the inhabitants of that ice-bound land, and without which, we almost fancy, no human beings could dwell there.

Gentle and docile as the Reindeer generally are, and obedient to the guidance of their masters, they sometimes prove very

restive and stubborn. One traveler in Lapland relates an instance of this kind when he and his companions were on their journey early one morning. The animals kicked, reared on their legs, butted with their antlers or horns, threw the sleds over on their sides and then rushed away with them at a tremendous rate, to the great peril of the travelers, some of whom

were thrown violently on the snow. For some time they were beyond all control; but at last, returned to their usual quiet behavior. Cases of such strange conduct, on the part of the reindeer, are, however, very rare.

Nor is the reindeer a native of Lapland alone, for it is found both in Europe and Asia, all along the shores of the Russian Empire which border on the Arctic Ocean. Wherever known it is highly valued by the half-civilized tribes who dwell in those very cold regions, as their food and clothing and principal wants are supplied by it; and the season for hunting it is one of the busiest of the whole year. Admiral Wrangell, of the Russian Imperial navy, who commanded an exploring expedition in Northern Siberia, in 1820, 1821 and 1822, gives a highly interesting account of the way in which the natives of those parts hunt this animal. He states that there are two hunting seasons—one in the spring when the animals quit the forests where they have sought shelter during the winter, and visit the northern plains nearer the sea, and the other in the autumn when they return to the forests. The autumn hunt is much the most important, for the animals are then healthy and well fed, their flesh is excellent, and as they have just acquired their winter coats, their fur is thick and warm. When the time for these migrations arrives, the hunters conceal themselves in light canoes on the rivers which they know, from the experience of past years, the animal will cross. The reindeer at these times travel in large herds very near together. As each herd approaches the river, the animals crowd closely together, and the largest and strongest take the lead, and in a few mo-

ments, the surface of the water is covered with them. This is the moment that the hunters rush, in their light canoes, from their hiding places, surround the animals and obstruct their passage, while two or three chosen men, armed with short spears, dash in amongst them, and kill large numbers in a very short time, or, at least so wound them that if they reach the shore, it is only to fall into the hands of the women and children. The whole scene is very exciting, "The throng of thousands of swimming reindeer, the loud clashing of their antlers, the swift canoes dashing in amongst them, the terror of the frightened animals, the dangerous positions of the hunters, the shouts of warning or applause of their friends, make up a picture that is very difficult to imagine without having seen it."

The office of the spearman is a very dangerous one. He has no easy task to keep his boat afloat in the midst of the dense

crowd of swimming animals, who will resist and fight the hunters, the males with their horns, teeth and hind legs, while the females endeavor to upset the boat by getting their fore legs over the gunwale. If they succeed in this, the hunter is lost, for it is scarcely possible for him to get out of the throng of excited animals; but the skill of the natives is so great that accidents rarely happen. A good

spearman will kill a hundred in an hour, and while he is so engaged, the rest of the hunters pick up the slain and fasten them together, each one being allowed to retain what he secures in this manner. What then, you may ask, does the spearman get to pay them for their skill and the dangers they have passed through? Though each one taken in the river belongs to him who first lays hold of it, all the wounded ones who reach the shore belong to the spearman who wounds them; and so skillful are many of these hunters that they will kill the smallest animals outright, but only wound the larger and finer ones so that they will just be able to reach the bank. This is hardly considered "the fair thing" amongst these Siberians, but is said to be almost always done. When the chase is over and the spoils have been divided, the slain deer are sunk in the river, the ice-cold water of which preserves them until there is time to prepare them for winter use. For this purpose, the flesh is either dried in the air, smoked, or frozen if early frosts set in. The Russians sometimes salt the best pieces. The tongues are considered a great dainty, and are reserved for particular occasions; indeed, smoked reindeer tongues form a considerable article of commerce in Russia.

G. R.

BIRDS of a feather will flock together. A boy or a man is known by the company he keeps.

WHEN we hear the names and learn the characters of a boy's companions, we can form an excellent judgment of what kind of a boy he is.

The mill of the Gods grinds slowly, but it grinds very fine.



THE MINERS' SAFETY LAMP.

SIR HUMPHREY DAVY.

From "TRIUMPHS OF INVENTION AND DISCOVERY."—
Published by T. Nelson & Sons, London.

CONCLUDED.

THROUGH his two friends, Mr. Gilbert and Mr. Watt, Davy formed the acquaintance of Dr. Beddoes, who was just setting up at Bristol, under the title of Pneumatic Institute, an establishment for investigating the medical properties of different gases; and who, appreciating his abilities, gave him the superintendence of the new institution.

Although only twenty years of age at this time, Davy was well abreast of the science of the day, and soon applied his vigorous and searching intellect to several successful investigations. His first scientific discovery was the detection of siliceous earth in the outer coating of reeds and grasses. A child was rubbing two pieces of bonnet cane together, and he noticed that a faint light was emitted; and on striking them sharply together, vivid sparks were produced just as if they had been flint and steel. The fact that when the outer skin was peeled off, this property was destroyed, showed that it was confined to the skin, and on subjecting it to analysis, silicic acid was obtained, and still more in reeds and grasses.

As superintendent of Dr. Beddoe's institution, his attention was, of course, chiefly directed to the subject of gases, and with the enthusiasm of youth, he applied himself ardently to the investigation of their elements and effects, attempting several very dangerous experiments in breathing gases, and more than once nearly sacrificing his life. In the course of these experiments, he found out the peculiar properties of nitrous oxide, or, as it has since been popularly called, "laughing gas," which impels any one who inhales it to go through some characteristic action,—a droll fellow to laugh, a dismal one to weep and sigh, a pugnacious man to fight and wrestle, or a musical one to sing.

At twenty-two years of age, such was the reputation he had acquired, that he got the appointment of lecturer at the Royal Institution, which was just then established, and found himself in a little while not only a man of mark in the scientific, but a "lion" in the fashionable world. Natural philosophy and chemistry had begun to attract a good deal of attention at that time; and Davy's enthusiasm, his clear and vivid explanations of the mysteries of science, and the poetry and imagination with which he invested the dry bones of scientific facts, caught the popular taste exactly. His lecture-room became a fashionable lounge, and was crowded with all sorts of distinguished people. The young lecturer became quite the rage, and was patted and fêted as the lion of the day. It was only six years back that he was the druggist's boy in a little country town, alarming and annoying the household with his indefatigable experiments. He could hardly have imagined, in one of his day dreams at the sea-side, that his fame would be acquired so quickly.

In spite of all the flatteries and attentions which were showered upon him, Davy stuck manfully to his profession; and if his reputation was somewhat artificial and exaggerated at the commencement, he amply earned and consolidated it by his valuable contributions to science during the rest of his career.

The name of Humphrey Davy will always be best known from its association with the ingenious safety lamp which he invented, and which well entitles him to rank as one of the benefactors of mankind. It was in the year 1815 that Davy first turned his attention to this subject. Of frequent occur-

rence from the very first commencement of coal-mining, the number of accidents from fire-damp had been sadly multiplied by the increase of mining-operations consequent on the introduction of the steam-engine. The dreadful character of some of the explosions which occurred about this time, the appalling number of lives lost, and the wide-spread desolation in some of the colliery districts which they had occasioned, weighed heavily on the minds of all connected with such matters. Not merely were the feelings of humanity wounded by the terrible and constant danger to which the intrepid miners were exposed, but it began to be gravely questioned whether the high rate of wage which the collier required to pay him not only for his labor, but for the risk he ran, would admit of the mines being profitably worked. It was felt that some strenuous effort must be made to preserve the miners from their awful foe. Davy was then in the plenitude of his reputation, and a committee of coal-owners besought him to investigate the subject, and if possible, provide some preventive against explosions. Davy at once went to the north of England, visited a number of the principal pits, obtained specimens of fire-damp, and analyzed them carefully, and having discovered the peculiarities of this element of destruction, after numerous experiments, devised the safety-lamp as its antagonist.

The principles upon which this contrivance rests, are the modification of the explosive tendencies of fire-damp (the inflammable gas in mines) when mixed with carbonic acid and nitrogen; and the obstacle presented to the passage of an explosion, if it should occur, through a hole less than the seventh of an inch in diameter; and accordingly, while the small oil lamp in burning itself mixes the surrounding gas with carbonic acid and nitrogen, the cylinder of wire-gauze which surrounds it prevents the escape of any explosion. It is curious that George Stephenson, the celebrated engineer, about the same time, hit on much the same expedient.

To control a "power that, in its tremendous effects, seems to emulate the lightning and the earthquake," and to enclose it in a net of the most slender texture, was indeed a grand achievement; and when we consider the many thousand lives which it has been the means of saving from a sudden and cruel death, it must be acknowledged to be one of the noblest triumphs, not only of science, but of humanity, which the world has ever seen. Honors were showered upon Davy, from the miners and coal-owners, from scientific associations, from crowned heads; but all must agree with Playfair in thinking that "it is little that the highest praise, and that even the voice of national gratitude when most strongly expressed, can add to the happiness of one who is conscious of having done such a service to his fellow-men." Davy himself said he "valued it more than anything he ever did." When urged by his friends to take out a patent for the invention, he replied—"No, I never thought of such a thing. My sole object was to serve the cause of humanity; and if I have succeeded, I am amply rewarded by the gratifying reflection of having done so."

The honors of knighthood and baronetage were successively conferred on Davy as a reward for his scientific labors; and the esteem of his professional brethren was shown in his election to the Presidentship of the Royal Institution, in which, oddly enough, he was succeeded by his old friend, Mr. Gilbert, who had first taken him by the hand, and whom he had got ahead of in the race of life.

Davy died at Geneva before he had completed his fifty-first year, no doubt from over-exertion and the unhealthy character of the researches he prosecuted so recklessly. Assiduous as he was in his devotion to his favorite science, he found time also to master several continental languages; to keep himself well acquainted with, and also to contribute to the literature of the day; and to indulge his passion for fly-fishing, at which he was a keen and practised adept.

Biography.

JOSEPH SMITH, THE PROPHET.

LANGUAGE conveys but a very weak idea, even when used in the most powerful manner, of the condition of affairs which existed in Nauvoo during the days of which we write. Joseph's enemies howled around him like a pack of wolves, indulging in the most murderous threats, forming all kinds of plots and moving earth and hell to compass his destruction. The leaders of this crusade were the Jaws, the Higbees, the Fosters and many other apostates of lesser note, who consorted with them. Those were never-to-be-forgotten days. When we reflect upon them, and recollect the constancy, the cheerfulness, the steadfastness and courage which Joseph manifested, we are filled with astonishment. God was with him, comforting and sustaining him, and in his anxiety to cheer the Saints and save them, he seemed to forget that he was the target at which every dart was hurled, and that it was his life above all others which the enemies of the Kingdom of God sought. The men who should have stood by him and sustained him, had proved traitors and used the knowledge which they possessed of the principles of the gospel for the purpose of destroying him.

Law had been Joseph's counselor, one of the First Presidency, and was, of course, familiar with the doctrine which God had made known in the revelation on Celestial Marriage. The knowledge that he had of this doctrine he communicated to others, and so determined was he to destroy Joseph, that he went before the Grand Jury at Carthage and swore that Joseph had been guilty of polygamy and adultery; and upon his testimony that Joseph had told him that he practiced polygamy, or as it was then called "spiritual-wife-ism," the Prophet was indicted.

When Joseph heard that the Grand Jury had indicted him, he started on horseback, with a few friends, for Carthage, thinking it best to meet his enemies before the Circuit Court, and have the indictments investigated. The company was swelled by several brethren joining the party while on the road and by the addition of others on Joseph's arrival in Carthage.

Charles A. Foster, brother of Robert D. Foster, a man who had never belonged to the Church, overtook the party outside of Carthage, and rode with Joseph into that place. Joseph had considerable conversation with him, and Foster was almost persuaded that he had been influenced to some extent by false reports.

After the arrival of the party at Carthage, Foster took Joseph into a private room and told him, in a friendly manner, that there was a conspiracy against his life. No doubt, from all that transpired at that time and subsequently, it was the intention of these apostates and mobbers to have taken Joseph's life. But situated as he was, having so many friends with him, they could not accomplish their evil design.

Joseph's lawyers used all reasonable exertions to bring forward his trial; but the prosecuting party were not ready.

Joseph was anxious for his trial, but the case was deferred till next term, and he was left to give bail to the sheriff at his

option. The sheriff told him he might return, and he would call upon him and take bail at his convenience.

You have only to refer to what we have previously written about William Law to see how inconsistent and utterly base were his language and conduct. At the time that he had the policemen examined to find out whether he was the "Brutus" referred to by Joseph, he stated under oath that he had never heard or seen or knew anything immoral or criminal in Joseph, and that he was ready to lay down his life for him.

Abundant evidence was in the hands of Joseph to prove the wickedness and utter corruption of these men. They were guilty of every crime of which they accused the Saints. Both William and Wilson Law were guilty of adultery. Wilson Law, who had acted as Major General in the Nauvoo Legion, was cashiered for dishonesty and for robbing the Government. Several affidavits had also been sworn to by females accusing the Higbees and Fosters of seduction and adultery. Joseph H. Jackson, who never belonged to the Church, but who was a confederate with them in their schemes, had been, according to his own acknowledgment, a murderer and robber. To these crimes, he added that of perjury, in swearing falsely against Joseph. Yet, with all these evidences against him and his party, Law professed to be very holy, said Joseph was a fallen Prophet, and that he (Law) was to take his place. He secretly organized a Church, asserting that he intended to maintain the organization of Prophets and Apostles, but to select new officers.

The Saints, who were faithful and lived in close communion with the Lord, knew for themselves that Joseph was innocent and pure; and the ravings and threatenings of these apostates had no effect upon them. The only ones influenced by them were those who were neglectful of the duties of their religion and were on the road to apostasy.

Joseph told the people repeatedly that he asked no odds of apostates; but he could go to the cross and lay down his life for the Saints. He did not want his brethren and sisters, however, to forsake him and the truth. He wanted their friendship, and he constantly exhorted them to be humble and patient and to render good for evil. On one occasion, he declared that he was the same man and was just as innocent as he was fourteen years ago. He said he had labored with those apostates himself until he was out of all manner of patience, and then he had sent his brother Hyrum to them. He had sent word to the Laws that if they had any case against him, he would go before the Church and confess. On the same occasion, in speaking to the Saints, he said:

"As I grow older, my heart grows tenderer for you. I am at all times willing to give up everything that is wrong, for I wish this people to have a virtuous leader. I have set your minds at liberty by letting you know the things of Jesus Christ. When I shrink not from your defence, will you throw me away for a new man who slanders you? I love you for your reception of me. Have I asked you for your money? No; you know better."

In speaking at another time to the Saints, he said:

"My enemies say that I have been a true Prophet. Why, I would rather be a fallen true Prophet than a false prophet. When a man goes about prophesying, and commands men to obey his teachings, he must either be a true or a false prophet. False prophets always arise to oppose the true Prophets; and they will prophesy so very near the truth that they will deceive almost the very chosen ones."

In the same discourse he said:

"Oh! I beseech you to go forward—go forward, and make your calling and your election sure; and if any man preach any other gospel than that which I have preached, he shall be cursed; and some of you who now hear me, shall see it, and know that I testify the truth concerning them. When did I ever teach anything wrong from this stand? When was I ever confounded? I want to triumph in Israel before I depart hence and am no more seen. I never told you I was perfect;

but there is no error in the revelations which I have taught; must I then be thrown away as a thing of naught?"

Many of those who heard him make these remarks, have lived to see his words fulfilled concerning those who preached another gospel to that which he preached. They have seen that all those who have done so, have been cursed. And as it was with Joseph, so will it always be with the man who holds the keys. The curse of the Almighty will rest upon every man who opposes him.

THE PUMA OR COUGAR.

THIS animal is found in the New World. Where is that? He was called the American lion. Many years ago, he was found as far north as Canada, and as far south as Patagonia. The puma is very strong, and, in attacking animals, he generally contrives to jump upon their backs, and tear them to pieces. This animal lives in high mountains and woody places. His head is round, his ears short, and the general color of the fur reddish brown.

The length of the body is about four feet, and its height a little more than two. The tail is nearly two feet in length, without any tuft.

A story is told about this animal, and two hunters who went in search of game in the Catskill Mountains in New York.

Each was armed with a gun, and had a dog with him. They agreed to go in contrary directions around the base of a hill, and, if either heard the other fire, he should go at once to the place from whence the sound came, as speedily as possible. They had not been long apart, when one heard the other's gun, and hastened in the direction of the sound. He looked for him in every direction in vain. At length he found the dog of his friend dead, and fearfully torn.

He continued the search for his friend; but had not gone far when he heard a savage growl. On raising his eyes, he saw a large cougar crouching on the branch of a tree, with the body of his friend under him. The animal's eyes glared at him, and he seemed to hesitate whether to leave his prey and take to flight, or to attack the hunter.

Knowing there was no time to lose, he fired, and mortally wounded the animal, who fell from the tree, with the dead body of his friend. His dog then attacked the wounded puma, but he laid that prostrate with one blow of his paw.

Knowing that his friend was entirely dead, and that it was not safe for him to go near, he went for assistance. When he returned, he found the puma and the two dogs dead, as well as his friend.

The puma is easily tamed, and likes to be petted like a cat. He likes to be noticed, and raises his back and stretches his limbs and purrs as the cat does. Many persons have tamed them, and allowed them to follow them about just like a dog.

You will see by these anecdotes that animals are made better by being taught and trained to good habits. It is just so with all children; unless taught to be gentle and kind and polite, they will be somewhat like the untamed animals, rough and cruel, and to be feared. God has given us dispositions to improve, and we must try to do what He requires of us.—[Selected.]

"This little fellow," said Martin Luther, of a bird going to roost, "has chosen his shelter, and is quietly rocking himself to sleep without a care for to-morrow's lodging; calmly holding by his little twig, and leaving God alone to think of him."

CINDERELLA.

THE story of Cinderella is familiar to every one, and yet there are few that treasure it up as in any respect true. But it has a foundation and a reality that really need no fairy god-mother, with her pumpkins and her rats, to make an entertaining tale. It is as follows:

In about the year 1730, a French actor by the name of Thevenard lived in Paris. He was rich and talented, but he had no wife, and we may believe he had never loved any one, but gave all his affection to those ideal characters that he could represent so finely on the stage. One day as he was walking leisurely along the streets of Paris, he came upon a cobbler's stall, and his eye was attracted by a dainty little shoe which lay there waiting for repairs. His imagination began immediately to form the little foot that must fit such a little shoe. He examined well, but only to admire it more and more. He went to the cobbler again, but he could learn nothing with regard to the owner of the shoe. This only increased his eagerness, and made him more determined to know to whom it belonged. Day by day he was disappointed, but he was not discouraged. At last the little foot needed the little shoe, and Thevenard met the owner, a poor girl, whose parents belonged to the humblest class. But the ardent actor thought not of caste or family. His heart had already pronounced the little one his wife. He married the girl, with no question of what people would say, and felt joy enough in hearing the tread of the light nimble feet through his silent rooms, to pay him for the sacrifice of people's approval. This is the true story of Cinderella, and from which the child-romance sprang.

For the Juvenile Instructor.

CHARADE.

I am a word composed of letters five,
My 5, 4, 3, 1, is what few men do;
My 5, 3, 4, describes all men alive,
But to be 2, 3, 1, is liked by few.

My 3, 4, 5, the juvenile doth use;
I'll say, by way of gentle 2, 3, 4, 1, too,
When he hath got to mind his P's and Q's
Sometime the 1, 3, 4, 1, is red, black or blue.

My 1, 3, 4, is metal, and 1, 2, 3, 4.
My baby-cat is pretty 5, 3, 1.
I guess I will not tell you any more
Or you will 1, 2, 3, 4, 5, and spoil the fun!

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